WHAT IS CLAIMED IS:

1. A game system having in a related fashion, to a game apparatus having game program storage means storing a game program and processing means for executing the game program, display means to display an image based on a result of processing by the processing means, comprising:

a housing to be held by a player; and

change-state detecting means provided related to said housing and for detecting at least one of an amount and a direction of a change applied to said housing, wherein

said game program storage means stores game space data including image data to display a space for game play, a display control program to cause said display means to display a game space based on the game space data; and

a simulation program for simulating based on an output of said change-state detecting means such that a state of the game space is changed related to at least one of a change amount and a change direction applied to said housing.

2. A game system according to claim 1, wherein said change-state detecting means is to detect, as a change amount and direction, at least one of an amount and a direction of a tilt applied to said housing, and

said simulation program simulating related to the at least one of an amount and a direction of a tilt applied to said housing such that the game space is put into a tilt state.

3. A game system according to claim 1, wherein said change-state detecting means detects, as a change amount and direction, at least one of an amount and a direction of a movement applied to said housing, and

said simulation program simulating related to the at least one of an amount and a direction of a movement applied to said housing such that the game space is put into a tilt state.

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4. A game system according to claim 1, wherein said change-state detecting means detects, as a change amount and direction, at least one of an amount and a direction of an impact applied to said housing, and

said simulation program simulating related to the at least one of an amount and a direction of an impact applied to said housing such that the game space is put into a tilt state.

5. A game system according to any of claims 1 to 4, wherein said change-state detecting means is for detecting both of an amount and a direction of a change applied to said housing, and

said simulation program simulating related to the both of an amount and a direction of an impact applied to said housing such that the game space is put into a tilt state.

6. A game system according to claim 1, wherein said housing is a housing of said game apparatus, and

said game apparatus being a portable game apparatus having said display means provided integral integrally on one main surface of said housing.

7. A game system according to claim 6, wherein said game program storage means is accommodated in a cartridge and detachably loaded in said housing of said portable game apparatus, and

said change-state detecting means detecting at least one of an amount and a direction of a change applied to said housing of said portable game apparatus when accommodated in said cartridge and said cartridge is loaded in said housing of said portable game apparatus.

8. A game system according to claim 7, wherein said change-state detecting means is for detecting an operation as a tool due to a change state applied to said housing of said

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portable game apparatus,

said game program storage means including a character data storage section to display a moving character movable on the game space,

the game space data being image data ~~to provide~~ _providing a_ display associating a tool having

5   a function of controlling a movement of the moving character displayed on the game space, and

said game program storage means including a character control program to read out a moving character stored in said character data storage section and ~~make~~ _enable_ processing related to at least one of a change amount and a change direction applied to said housing

10   based on an output of said change-state detecting means such that a display state of the moving character is under control of the tool.

9. A game system according to claim 1, wherein said game program storage means includes a character data storage section to display a moving character movable on the game space, and

15   said game program storage means including character control program to read out a moving character stored in said character data storage section and ~~make~~ _enable_ control related to at least one of a change amount and a change direction applied to said housing based on an output of said change-state detecting means such that a display state of the moving character changes.

20   10. A game system according to claim 1, wherein said game program storage means further includes a non-player character data storage section to display a non-player character to make a first action on the game space according to a predetermined program irrespectively of an operation by the player, and

said simulation program ~~controlling~~ _providing_ such that the non-player character makes a

25   first action previously determined by a program when any of change states in amount and

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direction is not detected by said change-state detecting means, and such that the non-player character makes in addition to the first action a second action related to at least one of an amount and a direction of a change based on an output of said change-state detecting means when at least one of change states in amount and direction is detected by said

5 change-state detecting means.

11. A game system according to claim 1, wherein said game program storage means includes a character data storage section to display a moving character movable on the game space,

the game space data including data to display a particular area defined such that,

10 when the moving character moves on the game space, the moving character is different in action from that in other area,

said simulation program controlling a display state of the moving character related to at least one of an amount and a direction of a change applied to said housing based on an output of said change-state detecting means, and display-controlling, when the moving

15 character moves on the game space, the moving character being different in action from that in other area.

12. A game system according to claim 1, wherein the game space data includes space data to display a greater game space than a display area to be displayed by said display means,

20 the display control program including data to display on said display means image data of a part of the game space existing in a range of the display area of the game space, and

said simulation program simulating a state of only the game space existing in the display area based on the at least one of an amount and a direction of a change in an output of said change-state detecting means.

25 13. A game system according to claim 1, wherein said change-state detecting

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means detects as a change amount a moving amount of said housing and as a change direction a moving direction,

the game space data including space data to display a game space greater than a display area of said display means, and

5   the display control program displaying on said display means a space area of a part of a game space corresponding to the display area, and gradually moving the display area of the game space in the moving direction by an area corresponding to the moving amount according to a movement of said housing.

14. A game system according to claim 1, wherein said game apparatus has

10   operating means to be operated by a player on one main surface of said housing, and

said simulation program changing a state of the game space in a manner of simulation based on a detection output of said change-state detecting means and an operating state of said operating means.

15. A game information storage medium storing a game program and detachably

15   loaded in a game system structured by operating means having display means in a related manner and including a housing to be held by a player, change-state detecting means provided related to the housing and for detecting at least one of an amount and a direction of a change applied to the housing, and processing means to display on the display means an image obtained by processing a program, comprising

20   game space data including image data to display a space for game play;

a display control program to cause said display means a game space based on the game space data; and

a simulation program to provide simulation based on an output of said change-state detecting means such that a state of the game space is changed related to at least one

25   of an amount and a direction of a change applied to said housing

16. A game information storage medium storing a game program and detachably loaded in a portable game apparatus including a housing integrally having display means to be held by a player, and processing means to display on the display means an image obtained by processing a program, wherein

5   a change-state detecting means is provided related to one of the portable game apparatus and the game information storage medium and for detecting at least one of an amount and a direction of a change applied to one of a housing of the portable game apparatus and the game information storage medium, the game information storage medium comprising:

10   game space data including image data to display a space for game play;

a display control program to cause said display means to display a game space based on the game space data; and

a simulation program to provide simulation based on an output of said change-state detecting means such that a state of the game space is changed related to at least one

15   of an amount and a direction of a change applied to said housing.

17. A game information storage medium according to claim 16, wherein said change-state detecting means is for detecting both of an amount and a direction of a change applied to said housing, and

said simulation program simulating such that a state of the game space is changed

20   related to the both of an amount and a direction of a change applied to said housing.

Sub. B3 >   18. A game system structured at least by two game apparatuses, wherein the two game apparatuses each have game program storage means to store a program, processing means to execute a game program, and a housing to be held by a player, and in a related fashion display means to display an image based on a result of

25   processing by said processing means,

at least one of the two game apparatuses being provided related to said housing

and having change-state detecting means to detect at least one of an amount and a

direction of a change applied to the housing,

the game system further having data transmitting means connected to the two

5   game apparatuses and for transmitting mutually-related data to the game apparatus on the

opposite side,

the respective of the game program storage means of the two game apparatuses

having the following:

game space data including image data to display a space for game play; and

10   display control programs to cause said display means to display a game space

based on the game space data, wherein

said game program storage means of at least the other of said two game

apparatuses further including a simulation program to provide simulation based on an

output of said change-state detecting means of said one game apparatus transmitted

15   through said data transmitting means such that a state of the game space of the other of

said game apparatuses is changed related to at least one of an amount and a direction of a

change applied to said housing of one of said game apparatuses.

19. A game system according to claim 18, wherein said change-state detecting

means are respectively provided on said two game apparatuses, and

20   the respective one of said game program storage means of said two game apparatuses

including a simulation program to provide simulation based on an output of said

change-state detecting means of said one game apparatus such that a state of the game

space of said the other game apparatus is changed related to said at least one of an amount and

a direction of a change applied to said housing of said one game apparatus.

25   20. A game system according to claim 18, wherein the game space data stored in

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said game program storage means of said one game apparatus and the game space data

stored in said game program storage means of said the other game apparatus are selected

as game space data,

the simulation program of said one game apparatus changing a state of the game

5   space of said one game apparatus correspondingly to a state of the other game space to be

simulated by the game space control program, and

the simulation program of said other game apparatus changing a state of the game

space of said the other game apparatus correspondingly to a state of one game space to be

simulated by the game space control program.

10   21. A game control method for a game apparatus including a housing to be held by

a player and change-state detecting means provided related to the housing and for

detecting at least one of an amount or a direction of a change applied to the housing,

comprising the steps of:

(a) displaying a game space according to a game program; and

15   (b) simulating based on an output of said change-state detecting means such that a

state of the game space is changed related to at least one of an amount and a

direction of a change applied to said housing:

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